

Sir:

## IAP15 Rec'd PCT/PTO 18 SEP 2016

PATENT Customer No. 22,852 Attorney Docket No. 10142.0005

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	)
Evy LUNDGREN-AKERLUND	) Group Art Unit: 1644
Application No.: 10/553,226	) Examiner: Maher M. Haddad
Filed: February 6, 2006	) Confirmation No.: 8983
For: MONOCLONAL ANTIBODY CAPABLE OF BINDING INTEGRIN ALPHA 10 BETA 1	) ) )
Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450	·

## RESPONSE TO RESTRICTION REQUIREMENT

In an Office Action dated July 17, 2006, the time for reply being extended one month to September 18, 2006 (September 17, 2006, being a Sunday), by the extension of time filed herewith, the Examiner required restriction under 35 U.S.C. §§ 121 and 372 between fourteen groups:

**Group I** - Claims 1-6 and 31-44, drawn to a monoclonal antibody or an antigen binding fragment thereof, a kit, a composition and a method of making;

**Group II** - Claims 7 and 10-13, drawn to a method for isolating a population of mammalian mesenchymal stem cells;

**Group III -** Claim 8, drawn to a method for isolating a population of mammalian chondrocytes;

**Group IV** - Claim 9, drawn to a method for isolating a population of mammalian ES cells;

Attorney Docket No. 10142.0005 Application No.: 10/553,226

**Group V** - Claims 14-16, drawn to a population of mammalian mesenchymal stem cells;

**Group VI** - Claims 17-19, drawn to a population of mammalian chondrocytes;

**Group VII -** Claims 20-22, drawn to a population of mammalian ES cells;

**Group VIII -** Claim 23, drawn to a method for detecting a mesenchymal stem cell in a sample;

**Group IX** - Claim 24, drawn to a method for detecting a chondrocyte in a sample;

**Group X** - Claim 25, drawn to a method for detecting an ES cell in a sample;

**Group XI** - Claim 26, drawn to a method for blocking the binding of a chondrocyte to an extracellular matrix molecule;

**Group XII** - Claim 27, drawn to a method for modulating the signaling of alpha10beta1 on a mammalian mesenchymal stem cell, ES cell or chondrocyte;

**Group XIII** - Claim 28, drawn to a method for detecting the expression of integrin alpha10beta1 in a tissue sample; and

**Group XIV** - Claims 29-30, drawn to a method for in vivo imaging the expression of integrin alpha10beta1 in a mammal.

According to Office, Groups I-XIV do not relate to a single general inventive concept under PCT Rules 13.1 and 13.2, and therefore restriction of the invention to one of the fourteen listed groups in required under 35 U.S.C. §§ 121 and 372. Office Action, page 3. Applicant respectfully traverses.

The claims of the instant application are united by the single inventive concept of a monoclonal antibody or fragment thereof that binds <u>specifically</u> to the extracellular I-domain of the integrin alpha10 chain. The inventive concept that unites the instant claims provides a special technical feature that contributes to the art.

Attorney Docket No. 10142.0005

Application No.: 10/553,226

Applicant also refers the Examiner to M.P.E.P. § 803, which sets forth the criteria

and guidelines for Examiners to follow in making proper requirements for restriction.

The M.P.E.P. instructs the Examiner as follows:

If the search and examination of an entire application can be made without <u>serious burden</u>, the Office <u>must</u> examine it on

the merits, even though it includes claims to distinct or

independent inventions.

M.P.E.P. § 803 (emphasis added). In the instant case, the Examiner has not

demonstrated that examining Groups I-XIV together would constitute a serious burden.

In fact, the Examiner has not even alleged that a separate search would be required for

each group. Accordingly, Applicant requests that the restriction requirement be

withdrawn. However, to be fully responsive, Applicant provisionally elects to prosecute

Group I, claims 1-6 and 31-44.

The Examiner has also indicated that Group XII (claim 27) is generic and

requires the election of a single cell type. Office Action, page 4. Because Applicant has

not elected the claim of Group XII for prosecution, it is Applicant's understanding that an

election of species is not required.

If the Examiner believes a telephone conference would be useful in resolving any

outstanding issues, the Examiner is invited to call the undersigned at (202) 408-4442.

If there is any fee due in connection with the filing of this Statement, please

charge the fee to our Deposit Account No. 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,

GARRETT & DUNNER, L.L.P.

Dated: September 18, 2006

/ John C. Stolpa

Reg. No. 57,632